

09/185, 904

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SEQUENCE LISTING

<110> Anderson, Christen M.
 Davis, Robert E.
 Clevenger, William
 Wiley, Sandra Eileen
 Willer, Scott W.
 Szabo, Tomas R.
 Ghosh, Soumitra S.

<120> PRODUCTION OF ADENINE NUCLEOTIDE
 TRANSLOCATOR (ANT), NOVEL ANT LIGANDS AND SCREENING ASSAYS
 THEREFOR

<130> 660088.420

<140> US 09/185,904
 <141> 1998-11-03

<160> 33

<170> FastSEQ for Windows Version 3.0

<210> 1
 <211> 894
 <212> DNA
 <213> Homo sapien

<400> 1

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gccagcaaac	agatcagtgc	tgagaaggcag	tacaaaggga	tcattgattg	180
atccctaaagg	agcaggggctt	cctctcccttc	tgaggagggtt	acctggccaa	240
taacttccca	cccaagctct	caacttcgcc	ttcaaggaca	cgtgatccgt	300
gggggtgtgg	atcggcataa	gcagttctgg	cgctactttt	ctggtaaccc	360
ggggccgcgt	gggcacaccc	cctttgtt	gtctacccgc	ttggacttgc	420
ttggctgtg	atgtgggcag	gcccgcctcc	cgtgagttcc	taggaccagg	480
atcaagatct	tcaagtctga	tggctgagg	gggtcttacc	atggtctggg	540
caaggcatca	ttatctatag	agctgcctac	agggtttcaaa	cgctctgtc	600
ctgcctgacc	ccaagaacgt	ttccggagtt	atgataactgc	caaggggatg	660
gcagtcgcag	gcacattttt	gtggacttgg	tgattggcca	gagtgtgacg	720
tcggcccgag	ggctgtgtc	tttaccccttt	gacactgttc	gtcgtagaat	780
aaggggccga	tattatgtac	acggggacag	tttgactgtc	gtatgtcag	840
gcaaaagacg	aaggagccaa	ggcccttcc	aaaggtgtt	ggtccaaatgt	894
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<210> 2
 <211> 897
 <212> DNA
 <213> Homo sapien

<400> 2

atgacagatg	ccgcattgtc	tttcgccaag	gacttctgg	caggtggagt	ggccgcagcc	60
atctccaaga	ccggggtagc	ccccatcgag	cggtcaagc	tgctgctgca	gtgtcagcat	120
gccagcaagc	agatcactgc	agataagcaa	tacaaaggca	ttatagactg	cgtggccgt	180

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atccccaaagg	agcaggaagt	tctgtcccttc	tggcgcggtta	acctggccaa	tgtcatcaga	240
tacttcccca	cccaggctct	taacttcgccc	ttcaaaagata	aatacaagca	gatcttctcg	300
ggtgtgtgg	acaagagaac	ccagttttgg	cgctactttg	cagggaatct	ggcatcggggt	360
ggtgcccgag	gggcccacatc	cctgtgtttt	gtgtaccctc	ttgattttgc	ccgtaccctgt	420
ctagcagctg	atgtgggtaa	agctggagct	gaaagggaat	tccgaggcct	cggtgactgc	480
ctggtaaga	tctacaaatc	tgtatgggatt	aaggggctgt	accaaggctt	taacgtgtct	540
gtgcagggtta	ttatcatcta	ccgagccgccc	tacttcggta	tctatgacac	tgcaaaggga	600
atgcttcgg	atcccaagaa	cactcacatc	gtcatcagct	ggatgatcgc	acagactgtc	660
actgctgttg	ccgggttgcac	ttcctatcca	tttgacaccg	ttcgcggcccg	catgatgatg	720
cagtcaaggc	gcaaaggaaac	tgacatcatg	tacacaggca	cgttgcactg	ctggcgaaag	780
attgctcg	atgaaggagg	caaagcttt	ttcaagggtg	catggtccaa	tgttctcaga	840
ggcatgggtg	gtgtttgt	gtttgttttg	tatgtataaa	tcaagaagta	cacataaa	897

<210> 3

<211> 897

<212> DNA

<213> Homo sapien

<400> 3

atgacggaaac	aggccatctc	tttgcacaaa	gacttcttgg	ccggaggcat	cgccgcggcc	60
atctccaaga	cgcccggtggc	tccgatcgag	cgggcacaagc	tgctgtgcac	ggcccgacac	120
gccagcaagc	agatcqcqc	cgacaaggcag	tacaaggcga	tctgtggactg	cattgtccgc	180
atccccaaagg	agcagggcgt	gctgtccctc	tggaggggca	accttgcacaa	cgtcattcgc	240
tacttcccca	ctcaagccct	caacttcgccc	ttcaaggata	agtacaagca	gatcttctcg	300
ggggggcgtgg	acaaggcacac	gcagttctgg	aggtaactttg	cgggcaacct	ggccctccggc	360
ggtgtggccg	gcccgcaccc	cctctgtttc	gtgtaccctc	tggattttgc	cagaacccgc	420
ctggcagcgg	acgtggaaa	gtcaggcaca	gagcgcgagt	tccgaggcct	gggagactgc	480
ctggtaaga	tcaccaagtc	cgacggcata	cgggggcctgt	accaggcctt	cagtgtctcc	540
gtcaggggca	tcatcatcta	ccggggcggcc	tacttcggcg	tgtacgatac	ggccaagggc	600
atgtcccccg	accccaagaa	cacgcacatc	gtgtgtgagct	ggatgatcgc	gcagaccgtg	660
acggccgtgg	ccggcgtgg	gttctacccc	ttcgacacgg	tgcggccggcg	catgatgatg	720
cagtccgggc	gcaaaggagc	tgacatcatg	tacacggcga	cgttgcactg	ttggaggaag	780
atttcagag	atgagggggg	caaggccctc	ttcaagggtg	cgtggtccaa	cgtccctgcgg	840
ggcatggggg	gcgccttcgt	gttgcctctg	tacgacgagc	tcaagaaggt	gatctaa	897

<210> 4

<211> 43

<212> DNA

<213> PCR Artificial Sequence

<220>

<223> PCR Primer

<400> 4

ttatatctcg	agtatgggtg	atcacgtttg	gagtttctta	aag	43
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<210> 5

<211> 43

<212> DNA

<213> PCR Artificial Sequence

<400> 5

tatatacgat	ccttagacat	atttttgtat	ctcattatac	aac	43
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<210> 6

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3

<211> 43
<212> DNA
<213> PCRArtificial Sequence

<400> 6
ttatatctcg agtatgacag atgccgctgt gtccttcgcc aag 43

<210> 7
<211> 43
<212> DNA
<213> PCRArtificial Sequence

<400> 7
tatataggta ccttatgtgt actttctttagt ttcattcatac aag 43

<210> 8
<211> 43
<212> DNA
<213> PCRArtificial Sequence

<400> 8
ttatatctcg agtatgacgg aacaggccat ctcccttcgcc aaa 43

<210> 9
<211> 44
<212> DNA
<213> PCRArtificial Sequence

<400> 9
tatataggta ccttagagtc accttcttga gtcgtcgta cagg 44

<210> 10
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Sequence primer

<400> 10
tatgccatag catttttatac c 21

<210> 11
<211> 18
<212> DNA
<213> Artificial Sequence

<400> 11
cgccaaaaca gccaaagct 18

<210> 12
<211> 45
<212> DNA
<213> Artificial Sequence

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<220>
<223> Mutagenic oligonucleotide primer

<400> 12
ggagatggcc tggatccgtca tcttatacgta atcgctgtac agatc 45

<210> 13
<211> 45
<212> DNA
<213> Artificial Sequence

<400> 13
gatctgtacg acgatgacga taagatgacg gaacaggcca tctcc 45

<210> 14
<211> 35
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR primer

<400> 14
cccgggggat tctgatgacg gaacaggcca tctcc 35

<210> 15
<211> 34
<212> DNA
<213> Artificial Sequence

<400> 15
cccggggctcg agtttagatgc accttcttga gctc 34

<210> 16
<211> 41
<212> DNA
<213> Artificial Sequence

<400> 16
ttataggatc catgacggaa cagggcatct cttcgccaa a 41

<210> 17
<211> 41
<212> DNA
<213> Artificial Sequence

<400> 17
ttaaagaatt ctttagatcac cttcttgagc tctgtac a g 41

<210> 18
<211> 18
<212> DNA
<213> Artificial Sequence

<220>

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<223> Sequencing primer

<400> 18

aaatgataac catctcgc

18

<210> 19

<211> 18

<212> DNA

<213> Artificial Sequence

<400> 19

acttcaagga gaatttcc

18

<210> 20

<211> 18

<212> DNA

<213> Artificial Sequence

<400> 20

acttcgcctt cacggata

18

<210> 21

<211> 18

<212> DNA

<213> Artificial Sequence

<400> 21

tacggccaaag ggcattct

18

<210> 22

<211> 18

<212> DNA

<213> Artificial Sequence

<400> 22

tgaagcggaa gttcctat

18

<210> 23

<211> 18

<212> DNA

<213> Artificial Sequence

<400> 23

atgccggttc ccgtacga

18

<210> 24

<211> 31

<212> DNA

<213> Artificial Sequence

<220>

<223> Mutagenic oligonucleotide primer

<400> 24

ggcctgttcc gtcatcttat cgtcatcgta g

31

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6

<210> 25
<211> 31
<212> DNA
<213> Artificial Sequence

<400> 25
cgacgatgac gataagatga cggaacaggc c 31

<210> 26
<211> 41
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR primer

<400> 26
ttaaagaatt catgacggaa caggccatct ccttcgccaa a 41

<210> 27
<211> 41
<212> DNA
<213> Artificial Sequence

<400> 27
ttataggatc tttagatcac ctttttgagc tcgtcgta a g 41

<210> 28
<211> 42
<212> DNA
<213> Artificial Sequence

<400> 28
ttaatggta ccatgacgga acaggccatc tccttcgcca aa 42

<210> 29
<211> 42
<212> DNA
<213> Artificial Sequence

<400> 29
ttataactcg a gtttagatcac ctttttgagc tcgtcgta a g 42

<210> 30
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic polypeptide

<400> 30
Cys Trp Arg Lys Ile Phe Arg Asp Glu Gly Gly Lys Ala Phe Phe
1 5 10 15

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<210> 31
<211> 297
<212> PRT
<213> Homo sapien

<400> 31

Met Gly Asp His Ala Trp Ser Phe Leu Lys Asp Phe Leu Ala Gly Ala
1 5 10 15
Val Ala Ala Ala Val Ser Lys Thr Ala Val Ala Pro Ile Glu Arg Val
20 25 30
Lys Leu Leu Leu Gln Val Gln His Ala Ser Lys Gln Ile Ser Ala Glu
35 40 45
Lys Gln Tyr Lys Gly Ile Ile Asp Cys Val Val Arg Ile Pro Lys Glu
50 55 60
Gln Gly Phe Leu Ser Phe Trp Arg Gly Asn Leu Ala Asn Val Ile Arg
65 70 75 80
Tyr Phe Pro Thr Gln Ala Leu Asn Phe Ala Phe Lys Asp Lys Tyr Lys
85 90 95
Gln Leu Phe Leu Gly Gly Val Asp Arg His Lys Gln Phe Trp Arg Tyr
100 105 110
Phe Ala Gly Asn Leu Ala Ser Gly Gly Ala Ala Gly Ala Thr Ser Leu
115 120 125
Cys Phe Val Tyr Pro Leu Asp Phe Ala Arg Thr Arg Leu Ala Ala Asp
130 135 140
Val Gly Arg Arg Ala Gln Arg Glu Phe His Gly Leu Gly Asp Cys Ile
145 150 155 160
Ile Lys Ile Phe Lys Ser Asp Gly Leu Arg Gly Leu Tyr Gln Gly Phe
165 170 175
Asn Val Ser Val Gln Gly Ile Ile Tyr Arg Ala Ala Tyr Phe Gly
180 185 190
Val Tyr Asp Thr Ala Lys Gly Met Leu Pro Asp Pro Lys Asn Val His
195 200 205
Ile Phe Val Ser Trp Met Ile Ala Gln Ser Val Thr Ala Val Ala Gly
210 215 220
Leu Leu Ser Tyr Pro Phe Asp Thr Val Arg Arg Arg Met Met Met Gln
225 230 235 240
Ser Gly Arg Lys Gly Ala Asp Ile Met Tyr Thr Gly Thr Val Asp Cys
245 250 255
Trp Arg Lys Ile Ala Lys Asp Glu Gly Ala Lys Ala Phe Phe Lys Gly
260 265 270
Ala Trp Ser Asn Val Leu Arg Gly Met Gly Gly Ala Phe Val Leu Val
275 280 285
Leu Tyr Asp Glu Ile Lys Lys Tyr Val
290 295

<210> 32
<211> 298
<212> PRT
<213> Homo sapien

<400> 32

Met Thr Asp Ala Ala Leu Ser Phe Ala Lys Asp Phe Leu Ala Gly Gly
1 5 10 15
Val Ala Ala Ala Ile Ser Lys Thr Ala Val Ala Pro Ile Glu Arg Val

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20	25	30
Lys Leu Leu Leu Gln Val Gln His	Ala Ser Lys Gln Ile	Thr Ala Asp
35	40	45
Lys Gln Tyr Lys Gly Ile Ile Asp Cys Val Val	Arg Ile Pro Lys Glu	
50	55	60
Gln Glu Val Leu Ser Phe Trp Arg Gly Asn Leu Ala Asn Val	Ile Arg	
65	70	75
Tyr Phe Pro Thr Gln Ala Leu Asn Phe Ala Phe Lys Asp Lys Tyr Lys		
85	90	95
Gln Ile Phe Leu Gly Gly Val Asp Lys Arg Thr Gln Phe Trp Arg Tyr		
100	105	110
Phe Ala Gly Asn Leu Ala Ser Gly Gly Ala Ala Gly Ala	Thr Ser Leu	
115	120	125
Cys Phe Val Tyr Pro Leu Asp Phe Ala Arg Thr Arg Leu Ala Ala Asp		
130	135	140
Val Gly Lys Ala Gly Ala Glu Arg Glu Phe Arg Gly Leu Gly Asp Cys		
145	150	155
Leu Val Lys Ile Tyr Lys Ser Asp Gly Ile Lys Gly Leu Tyr Gln Gly		
165	170	175
Phe Asn Val Ser Val Gln Gly Ile Ile Tyr Arg Ala Ala Tyr Phe		
180	185	190
Gly Ile Tyr Asp Thr Ala Lys Gly Met Leu Pro Asp Pro Lys Asn Thr		
195	200	205
His Ile Val Ile Ser Trp Met Ile Ala Gln Thr Val Thr Ala Val Ala		
210	215	220
Gly Leu Thr Ser Tyr Pro Phe Asp Thr Val Arg Arg Arg Met Met Met		
225	230	235
Gln Ser Gly Arg Lys Gly Thr Asp Ile Met Tyr Thr Gly Thr Leu Asp		
245	250	255
Cys Trp Arg Lys Ile Ala Arg Asp Glu Gly Gly Lys Ala Phe Phe Lys		
260	265	270
Gly Ala Trp Ser Asn Val Leu Arg Gly Met Gly Gly Ala Phe Val Leu		
275	280	285
Val Leu Tyr Asp Glu Ile Lys Lys Tyr Thr		
290	295	

<210> 33
 <211> 298
 <212> PRT
 <213> Homo sapien

<400> 33

Met Thr Glu Gln Ala Ile Ser Phe Ala Lys Asp Phe Leu Ala Gly Gly		
1	5	10
Ile Ala Ala Ala Ile Ser Lys Thr Ala Val Ala Pro Ile Glu Arg Val		
20	25	30
Lys Leu Leu Gln Val Gln His Ala Ser Lys Gln Ile Ala Ala Asp		
35	40	45
Lys Gln Tyr Lys Gly Ile Val Asp Cys Ile Val Arg Ile Pro Lys Glu		
50	55	60
Gln Gly Val Leu Ser Phe Trp Arg Gly Asn Leu Ala Asn Val Ile Arg		
65	70	75
Tyr Phe Pro Thr Gln Ala Leu Asn Phe Ala Phe Lys Asp Lys Tyr Lys		
85	90	95
Gln Ile Phe Leu Gly Gly Val Asp Lys His Thr Gln Phe Trp Arg Tyr		

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100	105	110
Phe Ala Gly Asn Leu Ala Ser Gly	Gly Ala Ala Gly Ala	Thr Ser Leu
115	120	125
Cys Phe Val Tyr Pro Leu Asp Phe	Ala Arg Thr Arg	Leu Ala Ala Asp
130	135	140
Val Gly Lys Ser Gly Thr Glu Arg	Glu Phe Arg Gly	Leu Gly Asp Cys
145	150	155
Leu Val Lys Ile Thr Lys Ser Asp	Gly Ile Arg Gly	Leu Tyr Gln Gly
165	170	175
Phe Ser Val Ser Val Gln Gly	Ile Ile Tyr Arg Ala	Ala Tyr Phe
180	185	190
Gly Val Tyr Asp Thr Ala Lys	Gly Met Leu Pro Asp	Pro Lys Asn Thr
195	200	205
His Ile Val Val Ser Trp Met	Ile Ala Gln Thr Val	Thr Ala Val Ala
210	215	220
Gly Val Val Ser Tyr Pro Phe Asp	Thr Val Arg Arg	Arg Met Met Met
225	230	235
Gln Ser Gly Arg Lys Gly Ala Asp	Ile Met Tyr Thr Gly	Thr Val Asp
245	250	255
Cys Trp Arg Lys Ile Phe Arg Asp	Glu Gly Lys Ala Phe	Phe Lys
260	265	270
Gly Ala Trp Ser Asn Val Leu Arg	Gly Met Gly Ala	Phe Val Leu
275	280	285
Val Leu Tyr Asp Glu Leu Lys Val	Ile	
290	295	

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